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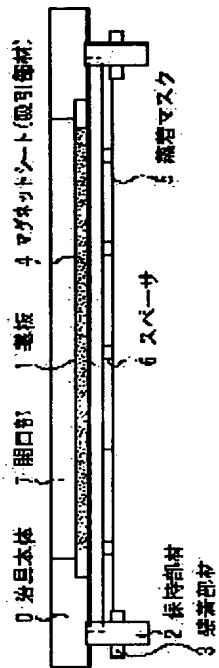
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(54) JIG FOR SURFACE WORKING AND SURFACE WORKING METHOD



(57)Abstract:

PROBLEM TO BE SOLVED: To solve the problem that, in the case the peripheral part of a mask is fixed by a jig in a state in which a substrate is provided with a prescribed gap, biased stress is applied to the mask, the mask is distorted to damage its flatness, and its parallelism to the surface of the substrate is locally deteriorated, by which the quality of the surface working is damaged.

SOLUTION: This jig for surface working is provided with a holding member 2 for holding a substrate 1 provided with a surface as an object for surface working and a back face on the side opposite thereto, a mounting member

3 mounting a mask 5 used for surface working on the surface of the substrate 1 via a spacer 6 prescribing a prescribed gap and a sucking member 4 arranged on the back face side of the substrate 1, allowing sucking force to act on the mask 5 in the process of surface working and subjecting the mask 5 to pressure- contact with the surface of the substrate 1 via the spacer 6.

* NOTICES *

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2.*** shows the word which can not be translated.

3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] The jig for surface treatment characterized by to have the attachment component for holding the substrate equipped with the front face set as the object of surface treatment, and the rear face of the opposite side, the carrying member which equips the front face of this substrate with the mask used for surface treatment through the spacer which specifies a predetermined gap, and the suction member

which it is allotted to the rear-face side of this substrate, make a suction force act on the this mask in surface treatment, and carry out the pressure welding of this mask to the front face of this substrate through this spacer.

[Claim 2] Said suction member is a jig for surface treatment according to claim 1 characterized by consisting of the electromagnet or permanent magnet which makes a magnetic suction force act on the mask which consists of a magnetic material.

[Claim 3] Said suction member is a jig for surface treatment according to claim 1 characterized by making the static electricity-suction force act on a mask.

[Claim 4] It is the jig for surface treatment according to claim 1 which said carrying member is equipped with an adjustment means to position this mask to this substrate, and is characterized by the ability of said suction member to cancel this suction force during positioning of this mask.

[Claim 5] Said carrying member is a jig for surface treatment according to claim 1 characterized by equipping the front face of this substrate with this mask through the spacer beforehand formed in the front face of this substrate.

[Claim 6] Said carrying member is a jig for surface treatment according to claim 1 characterized by equipping with the vacuum evaporation mask used when performing vacuum evaporation processing to the front face of this substrate.

[Claim 7] Said carrying member is a jig for surface treatment according to claim 6 characterized by equipping with the vacuum evaporation mask used when forming an organic electroluminescent element in the front face of this substrate by vacuum evaporation.

[Claim 8] The preparation process which prepares the substrate equipped with the front face set as the object of surface treatment, and the rear face of the opposite side, The wearing process which equips the front face of this substrate with the mask used for surface treatment through the spacer which specifies a predetermined gap, The surface treatment approach characterized by consisting of a suction process which a suction force is made to act on this mask from the rear-face side of this substrate, and carries out the pressure welding of this mask to the front face of this substrate through this spacer, and down stream processing which performs surface treatment to the front face of this substrate alternatively through this mask.

[Claim 9] Said suction process is the surface treatment approach according to claim 8 characterized by using the electromagnet or permanent magnet which makes a magnetic suction force act on the mask which consists of a magnetic material.

[Claim 10] Said suction process is the surface treatment approach according to claim 8 characterized by making the static electricity-suction force act on a mask.

[Claim 11] It is the surface treatment approach according to claim 8 characterized by for said wearing process including the adjustment process which positions this mask

to this substrate, and said suction process canceling this suction force during positioning of this mask.

[Claim 12] Said wearing process is a jig for surface treatment according to claim 8 characterized by equipping the front face of this substrate with this mask through the spacer beforehand formed in the front face of this substrate.

[Claim 13] Said wearing process is the surface treatment approach according to claim 8 characterized by equipping with the vacuum evaporatio mask used when performing vacuum evaporatio processing to the front face of this substrate.

[Claim 14] Said down stream processing is the surface treatment approach according to claim 13 characterized by forming an organic electroluminescent element in the front face of this substrate by vacuum evaporatio.

[Claim 15] The preparation process which prepares the substrate equipped with the front face where vacuum evaporatio formation of the electroluminescent element which constitutes the pixel of a display should be carried out, and the rear face of the opposite side, The wearing process which equips the front face of this substrate with the vacuum evaporatio mask used for vacuum evaporatio processing through the spacer beforehand formed in the front face of this substrate so that a predetermined gap might be specified, The manufacture approach of the display which consists of down stream processing which carries out vacuum evaporatio formation of the electroluminescent element alternatively on the front face of this substrate through the suction process which a suction force is made to act on this vacuum evaporatio mask from the rear-face side of this substrate, and carries out the pressure welding of this vacuum evaporatio mask to the front face of this substrate through this spacer, and this vacuum evaporatio mask.

[Claim 16] Said suction process is the manufacture approach of the display according to claim 15 characterized by using the electromagnet or permanent magnet which makes a magnetic suction force act on the vacuum evaporatio mask which consists of a magnetic material.

[Claim 17] Said suction process is the manufacture approach of the display according to claim 15 characterized by making the static electricity-suction force act on a mask.

[Claim 18] It is the manufacture approach of the display according to claim 15 characterized by for said wearing process including the adjustment process which positions this vacuum evaporatio mask to this substrate, and said suction process canceling this suction force during positioning of this vacuum evaporatio mask.

[Translation done.]